

```
=> b reg
FILE 'REGISTRY' ENTERED AT 15:35:11 ON 28 SEP 2007
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STRUCTURE FILE UPDATES: 27 SEP 2007 HIGHEST RN 948530-59-4
 DICTIONARY FILE UPDATES: 27 SEP 2007 HIGHEST RN 948530-59-4

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TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

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=> d que sta l10
L6      STR
Hy~^N~^Hy~^N~^Hy
1   2   3   4   5
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NODE ATTRIBUTES:

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DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS E9 C  E1 N  AT    1
ECOUNT  IS E4 C  E2 N  AT    3
ECOUNT  IS E9 C  E1 N  AT    5
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GRAPH ATTRIBUTES:

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RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS    5
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STEREO ATTRIBUTES: NONE

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L10     42 SEA FILE=REGISTRY SUB=L8 SSS FUL L6
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100.0% PROCESSED 36708 ITERATIONS          42 ANSWERS
SEARCH TIME: 00.00.01
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=> d bib abs hitrn fhitstr l13 1
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:n
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FILE COVERS 1907 - 28 Sep 2007 VOL 147 ISS 15
 FILE LAST UPDATED: 27 Sep 2007 (20070927/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

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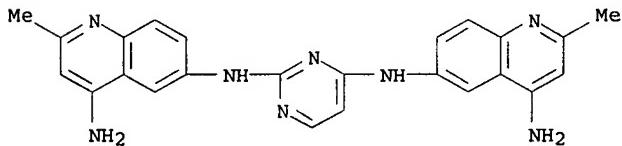
L13 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN
 AN 2001:416931 HCAPLUS
 DN 135:33495
 TI Arylamine derivatives and their use as anti-telomerase agent
 IN Maillet, Patrick; Riou, Jean-Francois; Mergny, Jean-Louis; Laoui, Abdelazize; Lavelle, Francois; Petitgenet, Odile
 PA Aventis Pharma S.A., Fr.
 SO PCT Int. Appl., 66 PP.
 CODEN: PIXXD2
 DT Patent
 LA French
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|--------------|
| PI | WO2001040218 | A1 | 20010607 | 2000WO-FR03310 | 20001127 <-- |
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| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | FR--2801588 | A1 | 20010601 | 1999FR-0015031 | 19991129 <-- |
| | FR--2801588 | B1 | 20020301 | | |
| | CA--2392507 | A1 | 20010607 | 2000CA-2392507 | 20001127 <-- |
| | BR2000015992 | A | 20020806 | 2000BR-0015992 | 20001127 <-- |
| | EP--1244650 | A1 | 20021002 | 2000EP-0985339 | 20001127 <-- |
| | EP--1244650 | B1 | 20030625 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| | HU-200204429 | A2 | 20030428 | 2002HU-0004429 | 20001127 <-- |
| | JP2003515604 | T | 20030507 | 2001JP-0541902 | 20001127 <-- |
| | EE-200200263 | A | 20030616 | 2002EE-0000263 | 20001127 <-- |
| | AT---243692 | T | 20030715 | 2000AT-0985339 | 20001127 <-- |
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| | ES---2202206 | T3 | 20040401 | 2000ES-0985339 | 20001127 <-- |
| | US---6645964 | B1 | 20031111 | 2000US-0722361 | 20001128 <-- |
| | MX2002PA05276 | A | 20021107 | 2002MX-PA05276 | 20020527 <-- |
| | IN2002DN00540 | A | 20040228 | 2002IN-DN00540 | 20020527 <-- |
| | NO2002002528 | A | 20020528 | 2002NO-0002528 | 20020528 <-- |
| | ZA2002004266 | A | 20030828 | 2002ZA-0004266 | 20020528 <-- |
| | BG----106753 | A | 20030228 | 2002BG-0106753 | 20020529 <-- |
| | US2004053966 | A1 | 20040318 | 2003US-0658394 | 20030910 <-- |
| PRAI | 1999FR-0015031 | A | 19991129 | <-- | |
| | 2000FR-0010561 | A | 20000811 | <-- | |
| | 2000US-176632P | P | 20000119 | <-- | |
| | 2000US-218059P | P | 20000713 | <-- | |
| | 2000WO-FR03310 | W | 20001127 | <-- | |
| | 2000US-0722361 | A3 | 20001128 | <-- | |
| OS | MARPAT 135:33495 | | | | |
| AB | Nitrogen heterocycles, especially diaminotriazines, were prepared for use as telomerase inhibitors and anticancer agents. Thus, 2-amino-4,6-dichloro-1,3,5-triazine was treated with 1-methyl-4,6-quinaldinium chloride hydrochloride to give 2-amino-4,6-bis(1-methyl-4-amino-6-quinaldinio)amino-1,3,5-triazine dichloride hydrochloride which was converted to its free base. The free base had a telomerase-inhibiting IC ₅₀ of 0.25 μM and a cytotoxic IC ₅₀ of 0.59-1.9 μM. | | | | |
| IT | 343876-24-4P | | | | |
| | RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of triazinediamine derivs. as telomerase inhibitors and antitumor agents) | | | | |
| IT | 343876-24-4P | | | | |
| | RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) | | | | |

(preparation of triazinediamine derivs. as telomerase inhibitors and antitumor agents)

RN 343876-24-4 HCPLUS

CN 4,6-Quinolinediamine, N6,N6'-2,4-pyrimidinediylbis[2-methyl-, trihydrochloride (9CI) (CA INDEX NAME)



● 3 HCl

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d bib abs hitstr 116 tot

L16 ANSWER 1 OF 2 HCPLUS COPYRIGHT 2007 ACS on STN
AN 1971:435658 HCPLUS

DN 75:35658

TI Antimalarials. "Distal" hydrazine derivatives of 7-chloroquinoline
AU Singh, Tara; Hoops, John F.; Biel, John H.; Hoya, Wallace K.; Stein,

Robert George; Cruz, Deanna R.

CS Res. Lab., Aldrich Chem. Co., Inc., Milwaukee, WI, USA

SO Journal of Medicinal Chemistry (1971), 14(6), 532-5

CODEN: JMCMAR; ISSN: 0022-2623

DT Journal

LA English

GI For diagram(s), see printed CA Issue.

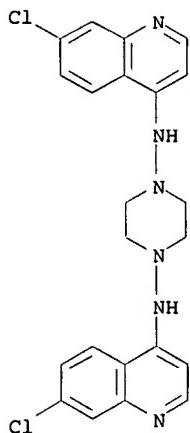
AB 7-Chloroquinolines (I) containing a hydrazine feature in the side chain attached at position 4, were prepared from 4,7-dichloroquinoline and 7-chloro-4-(3-bromo-1-methylpropylamino)quinoline by reacting with the required hydrazine, and were tested for the antimalarial activity against Plasmodium berghei in mice. 1,4-Bis(7-chloro-4-quinolylamino)-piperazine was the best, in which the end NH₂ was substituted by a 2nd mol. of 7-chloroquinoline. It showed curative activity at 40 mg/kg, i.p., without toxicity even up to the maximum dose of 640 mg/kg. The I with a distal hydrazine, excluding active 1-[2-(7-chloro-4-quinolylamino)-2-methylethyl]-1-methylhydrazine, were inactive, but were highly toxic. The I having a hydrazinium bromide feature, although found curative, were also quite toxic.

IT 23512-27-8P

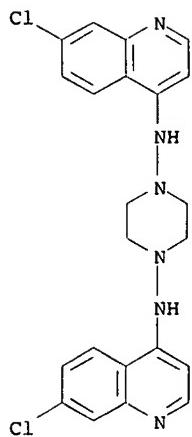
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 23512-27-8 HCPLUS

CN 1,4-Piperazinediamine, N,N'-bis(7-chloro-4-quinolyl)- (9CI) (CA INDEX NAME)



L16 ANSWER 2 OF 2 HCPLUS COPYRIGHT 2007 ACS on STN
 AN 1970:3335 HCPLUS
 DN 72:3335
 TI Antimalarial substances. XVIII. Synthetic schistosomicides. 13.
 Antimalarial and antischistosomal effects of proximal hydrazine and hydroxylamine analogs of chloroquine and quinacrine
 AU Elslager, Edward F.; Tendick, Frank H.; Werbel, Leslie M.; Worth, Donald F.
 CS Med. and Sci. Affairs Div., Parke, Davis and Co., Ann Arbor, MI, USA
 SO Journal of Medicinal Chemistry (1969), 12(5), 970-4
 CODEN: JMCMAR; ISSN: 0022-2623
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB Representative 4-(2,2-dialkylhydrazino)quinolines, 6 - chloro - 9 - (2,2 - dialkylhydrazino) - 2-methoxyacridines, 12-(2,2-dialkylhydrazino)benz[b]acridines, 2,-2'-(benz[c]acridin-7-ylhydrazono)diethanol, 7-chloro-4 - [2 - (dialkylamino)ethoxyamino]quinolines, and 6-chloro-9-[2 - (dimethylamino)ethoxyamino]-2-methoxyacridine were synthesized to enable an assessment of the antiparasitic effects conferred by substituting a hydrazine or hydroxylamine moiety for the proximal amine function of chloroquine, quinacrine, and 7-[3-(octylamino)propylamino]benz[c]acridine relatives. The compds. were isolated in 3-92% yield by the condensation of 4,7-dichloroquinoline, 4-chloro-6-methoxyquinoline, 4-chloro-6-methoxyquinaldine, 6,9-dichloro-2-methoxyacridine, 12-chlorobenz[b]acridine, or 7-chlorobenz[c]acridine with the appropriate 1,1-dialkylhydrazine or 2-(dialkylamino)ethoxyamine in phenol or EtOH. Among them, 6-methoxy-4-(morpholinoamino)-quinaldine exhibited modest activity against Schistosoma mansoni in mice and effected a 28-51% reduction of live worms at drug-diet doses of 224-303 mg./kg. daily for 14 days. Six compds. were active against a normal strain of Plasmodium berghei in mice at doses ranging from 2.7-219 mg./kg./day for 6 days. 7-Chloro-4-(4-methyl-1-piperazinylamino)quinoline, and 4,4'-(1,4-piper-a zinediydiimino)bis[7-chloroquinoline] (I) were approx. 28 and 27 times as potent as quinine, resp., against P. berghei, but I was highly cross-resistant with chloroquine. Structure-activity relations are discussed.
 IT 23512-27-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 23512-27-8 HCPLUS
 CN 1,4-Piperazinediamine, N,N'-bis(7-chloro-4-quinolinyl)- (9CI) (CA INDEX NAME)



=> d his

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FILE 'REGISTRY' ENTERED AT 15:25:28 ON 28 SEP 2007

FILE 'HCAPLUS' ENTERED AT 15:25:35 ON 28 SEP 2007
L2      TRA L1 1- RN :    73 TERMS

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L4      54 L3 AND NC5-C6/ES
L5      1 L4 AND (N2C4 OR NCNC3 OR NC2NC2)/ES
L6      STR
L7      0 L6
L8      36708 >=2 NC5-C6/ES
L9      2 L6 SAM SUB=L8
L10     42 L6 FULL SUB=L8
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L11     1 L10 AND L3

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L16     2 L15 AND L13

FILE 'HCAOLD' ENTERED AT 15:34:45 ON 28 SEP 2007
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